



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 170448 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170448 has 13 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Bircsak\_30, Dussy\_31, Agaliana\_31, Gompeii16\_30
- Track 2 : Smeagol\_32, Peterson\_33, Seabiscuit\_32
- Track 3 : Squee\_31, Perseus\_32, U2\_30
- Track 4 : KSSJEB\_30, SarFire\_30, DD5\_31

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 2, it was called in 6 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agaliana\_31, Bircsak\_30, Dussy\_31, Gompeii16\_30, Peterson\_33, Seabiscuit\_32, Smeagol\_32,

Genes that have the "Most Annotated" start but do not call it:

- DD5\_31, KSSJEB\_30, Perseus\_32, SarFire\_30, Squee\_31, U2\_30,

Genes that do not have the "Most Annotated" start:

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### **Summary by start number:**

Start 1:

- Found in 13 of 13 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 23.1% of time when present
- Phage (with cluster) where this start called: DD5\_31 (A1), KSSJEB\_30 (A1), SarFire\_30 (A1),

Start 2:

- Found in 13 of 13 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 6 of 12
- Called 53.8% of time when present

- Phage (with cluster) where this start called: Agaliana\_31 (A1), Bircsak\_30 (A1), Dussy\_31 (A1), Gompeii16\_30 (A1), Peterson\_33 (A1), Seabiscuit\_32 (A1), Smeagol\_32 (A1),

Start 4:

- Found in 10 of 13 ( 76.9% ) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Perseus\_32 (A1), Squee\_31 (A1), U2\_30 (A1),

### **Summary by clusters:**

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 3 times for cluster A1.
- Start number 2 was manually annotated 6 times for cluster A1.
- Start number 4 was manually annotated 3 times for cluster A1.

### **Gene Information:**

Gene: Agaliana\_31 Start: 24027, Stop: 24374, Start Num: 2

Candidate Starts for Agaliana\_31:

(Start: 1 @23937 has 3 MA's), (Start: 2 @24027 has 6 MA's), (3, 24048), (Start: 4 @24054 has 3 MA's), (5, 24180), (6, 24225),

Gene: Bircsak\_30 Start: 24216, Stop: 24563, Start Num: 2

Candidate Starts for Bircsak\_30:

(Start: 1 @24126 has 3 MA's), (Start: 2 @24216 has 6 MA's), (3, 24237), (Start: 4 @24243 has 3 MA's), (5, 24369), (6, 24414),

Gene: DD5\_31 Start: 24355, Stop: 24792, Start Num: 1

Candidate Starts for DD5\_31:

(Start: 1 @24355 has 3 MA's), (Start: 2 @24445 has 6 MA's), (3, 24466), (Start: 4 @24472 has 3 MA's), (5, 24598), (6, 24643),

Gene: Dussy\_31 Start: 23946, Stop: 24293, Start Num: 2

Candidate Starts for Dussy\_31:

(Start: 1 @23856 has 3 MA's), (Start: 2 @23946 has 6 MA's), (3, 23967), (Start: 4 @23973 has 3 MA's), (5, 24099), (6, 24144),

Gene: Gompeii16\_30 Start: 24217, Stop: 24564, Start Num: 2

Candidate Starts for Gompeii16\_30:

(Start: 1 @24127 has 3 MA's), (Start: 2 @24217 has 6 MA's), (3, 24238), (Start: 4 @24244 has 3 MA's), (5, 24370), (6, 24415),

Gene: KSSJEB\_30 Start: 23427, Stop: 23864, Start Num: 1

Candidate Starts for KSSJEB\_30:

(Start: 1 @23427 has 3 MA's), (Start: 2 @23517 has 6 MA's), (3, 23538), (Start: 4 @23544 has 3 MA's), (5, 23670), (6, 23715),

Gene: Perseus\_32 Start: 24652, Stop: 24972, Start Num: 4

Candidate Starts for Perseus\_32:

(Start: 1 @24535 has 3 MA's), (Start: 2 @24625 has 6 MA's), (3, 24646), (Start: 4 @24652 has 3 MA's), (5, 24778), (6, 24823),

Gene: Peterson\_33 Start: 25638, Stop: 25985, Start Num: 2

Candidate Starts for Peterson\_33:

(Start: 1 @25548 has 3 MA's), (Start: 2 @25638 has 6 MA's), (3, 25659), (5, 25791), (6, 25836),

Gene: SarFire\_30 Start: 23758, Stop: 24195, Start Num: 1

Candidate Starts for SarFire\_30:

(Start: 1 @23758 has 3 MA's), (Start: 2 @23848 has 6 MA's), (3, 23869), (Start: 4 @23875 has 3 MA's), (5, 24001), (6, 24046),

Gene: Seabiscuit\_32 Start: 23754, Stop: 24101, Start Num: 2

Candidate Starts for Seabiscuit\_32:

(Start: 1 @23664 has 3 MA's), (Start: 2 @23754 has 6 MA's), (3, 23775), (5, 23907), (6, 23952),

Gene: Smeagol\_32 Start: 25067, Stop: 25414, Start Num: 2

Candidate Starts for Smeagol\_32:

(Start: 1 @24977 has 3 MA's), (Start: 2 @25067 has 6 MA's), (3, 25088), (5, 25220), (6, 25265),

Gene: Squee\_31 Start: 24620, Stop: 24940, Start Num: 4

Candidate Starts for Squee\_31:

(Start: 1 @24503 has 3 MA's), (Start: 2 @24593 has 6 MA's), (3, 24614), (Start: 4 @24620 has 3 MA's), (5, 24746), (6, 24791),

Gene: U2\_30 Start: 23893, Stop: 24213, Start Num: 4

Candidate Starts for U2\_30:

(Start: 1 @23776 has 3 MA's), (Start: 2 @23866 has 6 MA's), (3, 23887), (Start: 4 @23893 has 3 MA's), (5, 24019), (6, 24064),